Maintaining excellence in a challenging budget environment

Dr. G. Wayne Clough

President's Administrative Retreat

August 22, 2003

Admissions

- 2,200 incoming freshmen (same as last year)
- Strong academic profile:
  - Average SAT: 1337
  - Average GPA: 3.7
- Largest number of international freshmen in Tech history.

State funding levels

- Sustained $24.3 million in cumulative cuts through FY ’03 (11.3% of state-funded budget)
- FY ’04 budget:
  - Additional $4.3 million in cuts from FY ’03
  - Another 2.5% cut in the works
  - GRA funded at $24 million
  - Only one capital project funded in System
- Potential for 5% cut in FY ’05

Allocations to Georgia Tech

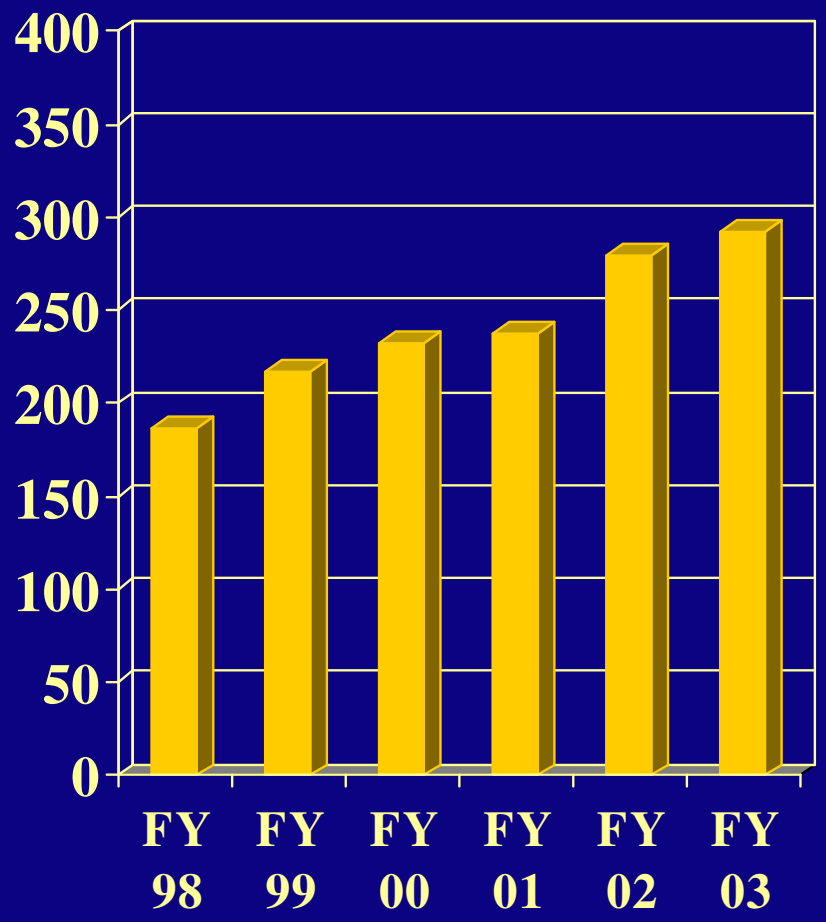
- Received expected amount in workload allocation ($10.9 million)
- Passed along $1.4 million for GTREP
- $2.25 million for operations and maintenance funds for new facilities, including Technology Square
- $1.3 million performance-based increase and strategic allocation

Tuition and fees

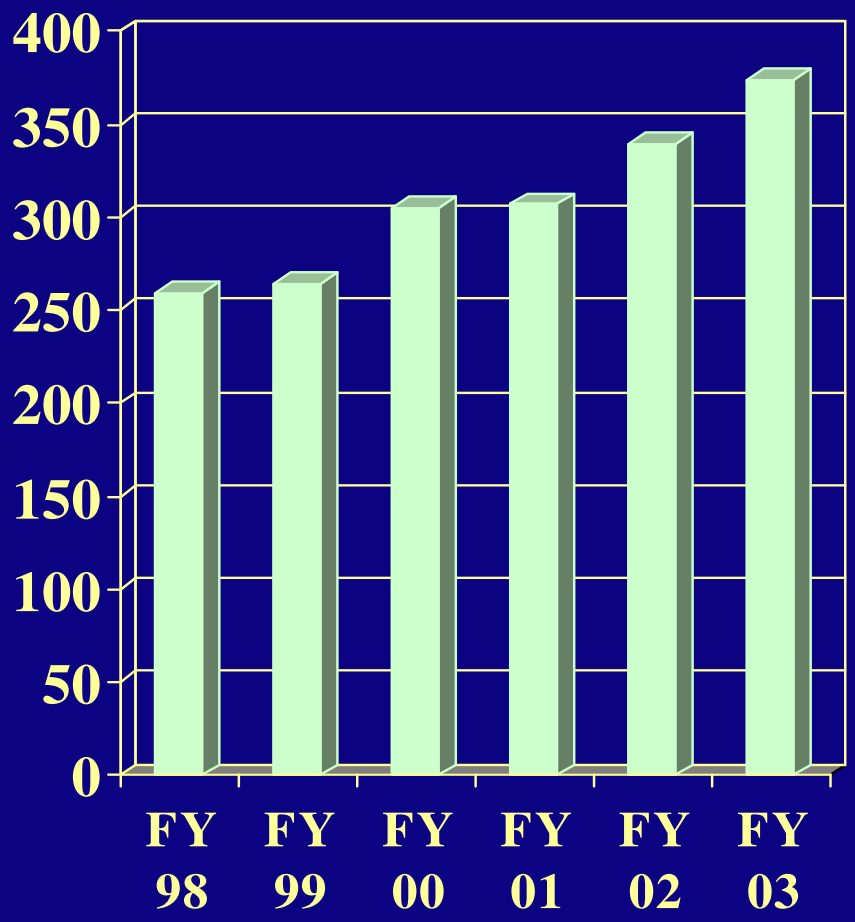
- Tiered tuition increases:
  - 15% increase at research universities
  - 10% increase at 4-year institutions
  - 5% increase at 2-year colleges
- Tuition and fees - Georgia Tech:
  - In-state: $2,038 per semester (+ $230)
  - Out-of-state: $8,001 per semester (+ $1,008)
- National average in-state tuition & fees for 4-year public universities: $2,200 per semester

Expanding research enterprise

Awards

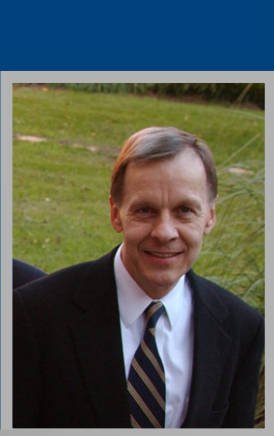


Expenditures



Succession Planning:
Building on Success






The Arizona Group: Power Pack

Seth Marder

Chemistry & Biochemistry

Jean-Luc Brédas

Chemistry & Biochemistry

Bernard Kippelen

Electrical Engineering

Joe Perry

Chemistry & Biochemistry

New Leaders: A Strong Foundation

Rich DeMillo

Imlay Dean of Computing

Don Giddens

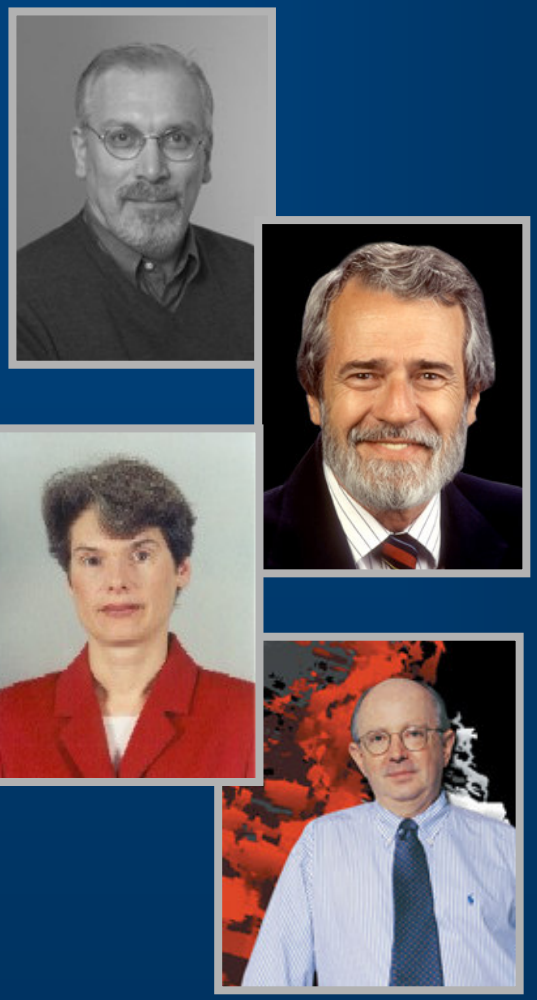
Dean of Engineering

Diana Hicks

Chair, School of Public Policy

Larry McIntire

Chair, Coulter Department of Biomedical Engineering



Endowed Chairs: A Great Opportunity

Barbara Boyan
Price Gilbert Jr. Chair in Tissue Engineering

Russell Dupuis
Steve W. Chaddick Chair in Electro-Optics

Catherine Ross
Harry West Chair for Quality Growth and Regional Development

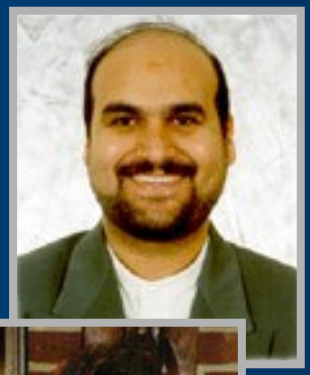
Marie Thursby
Hal and John Smith Chair in Entrepreneurship

Young Stars: Making News, Making History

Ali Adibi

Electrical & Computer Engineering

Packard Fellow in Science & Technology



Michael Chapman

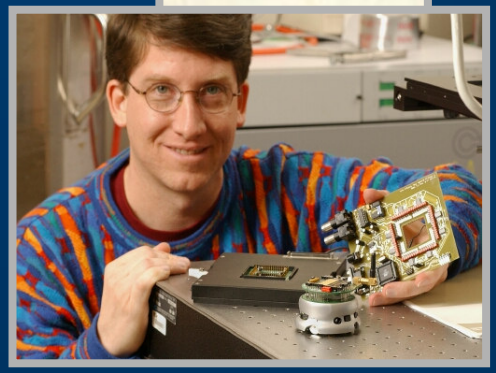
Physics

all-optical cooling of atoms to nearly absolute zero

Steve Potter

Biomedical Engineering

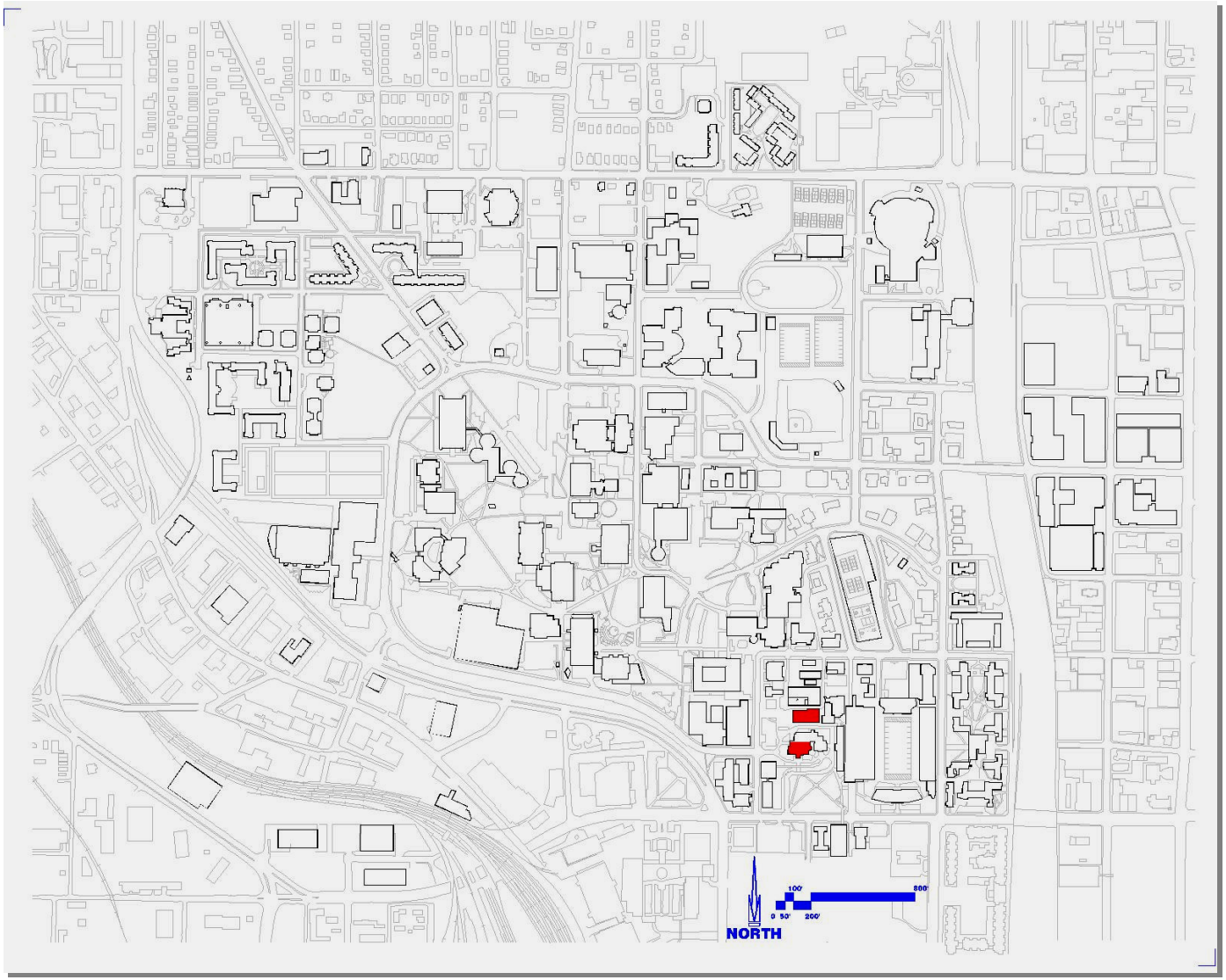
Robotics utilizing rat brain signals



Georgia Institute of Technology

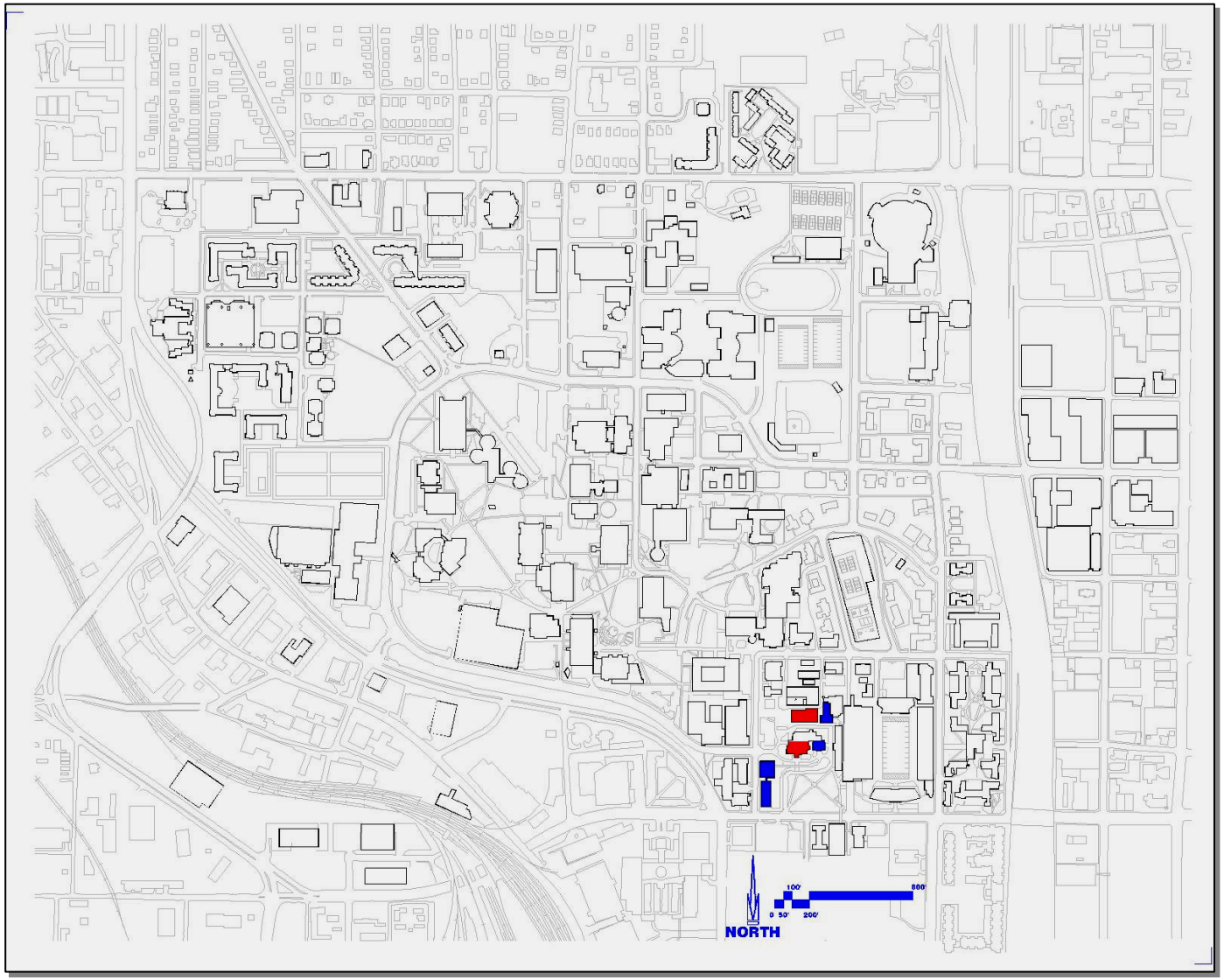
Georgia Tech Facilities Update 1995 - 2005

The History of Building Construction



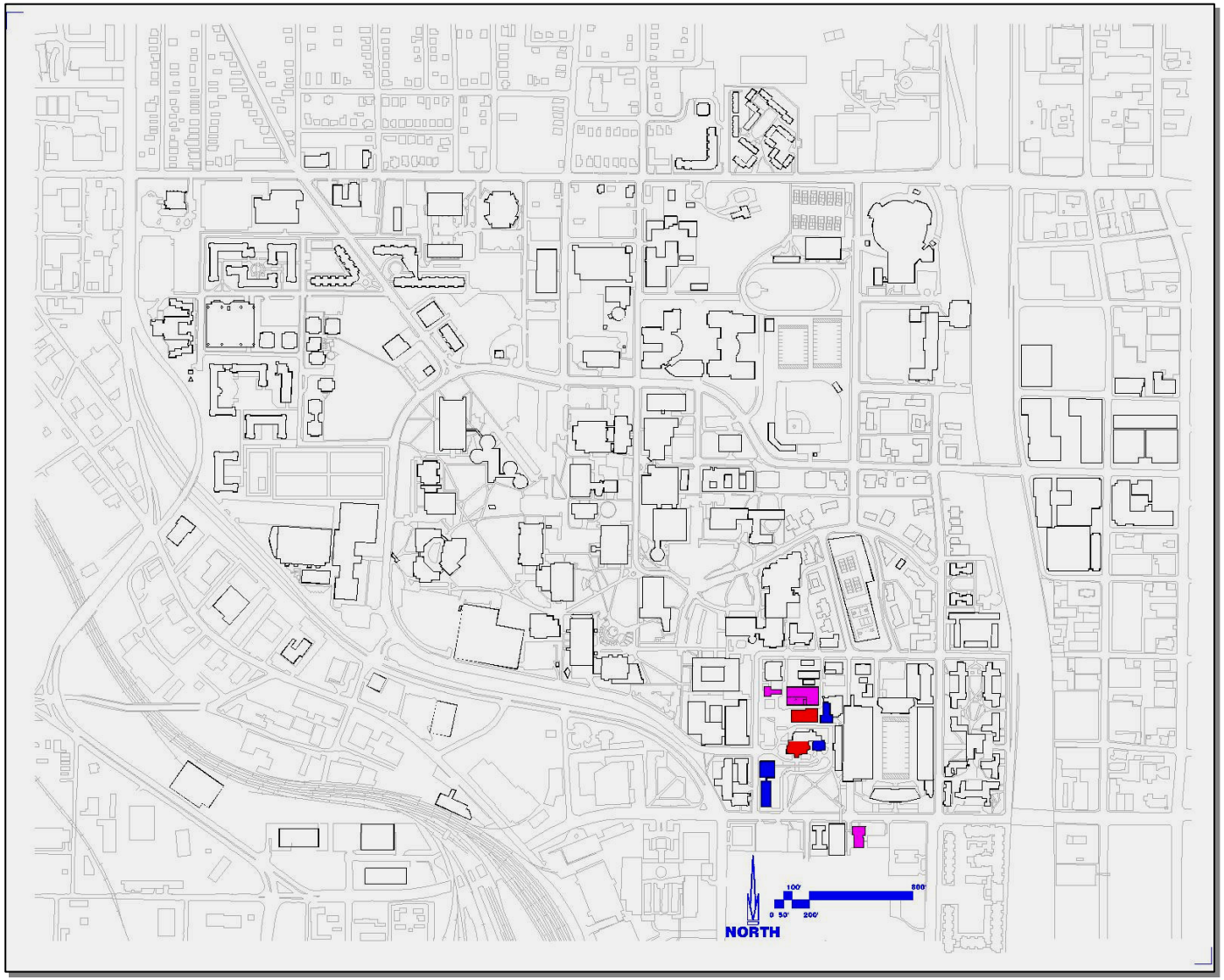
1800's

The History of Building Construction



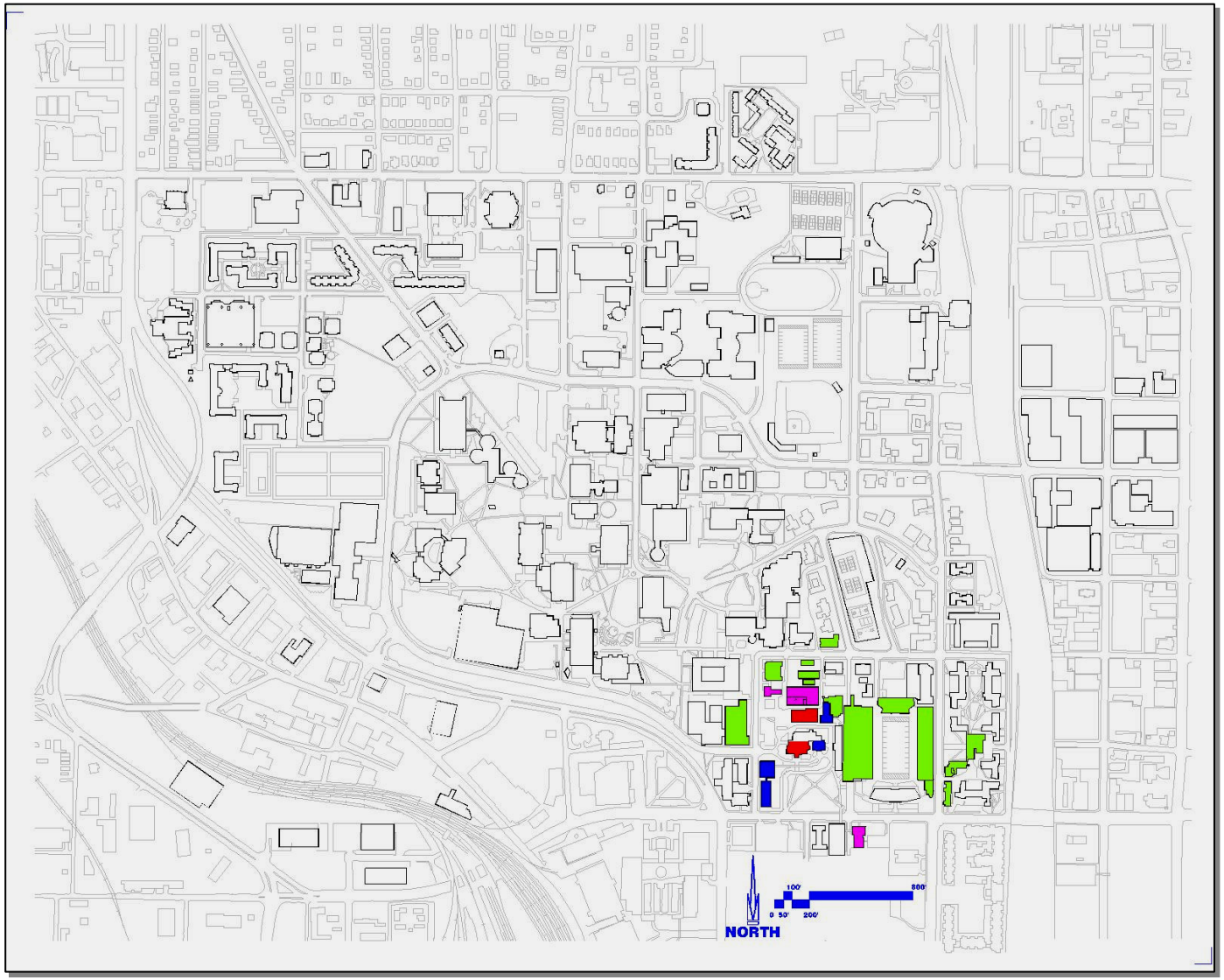
1800's
1900's

The History of Building Construction



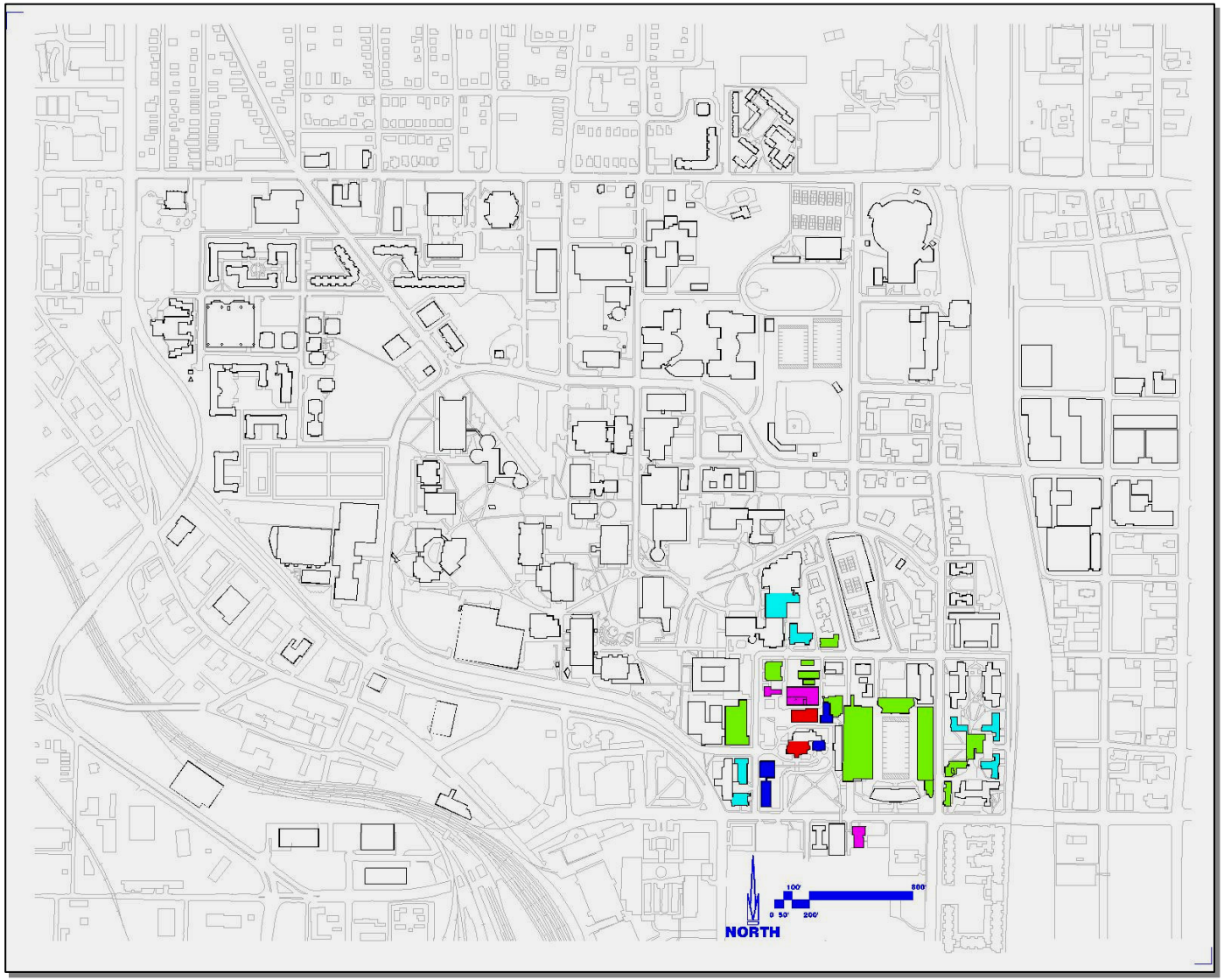
1800's
1900's
1910's

The History of Building Construction



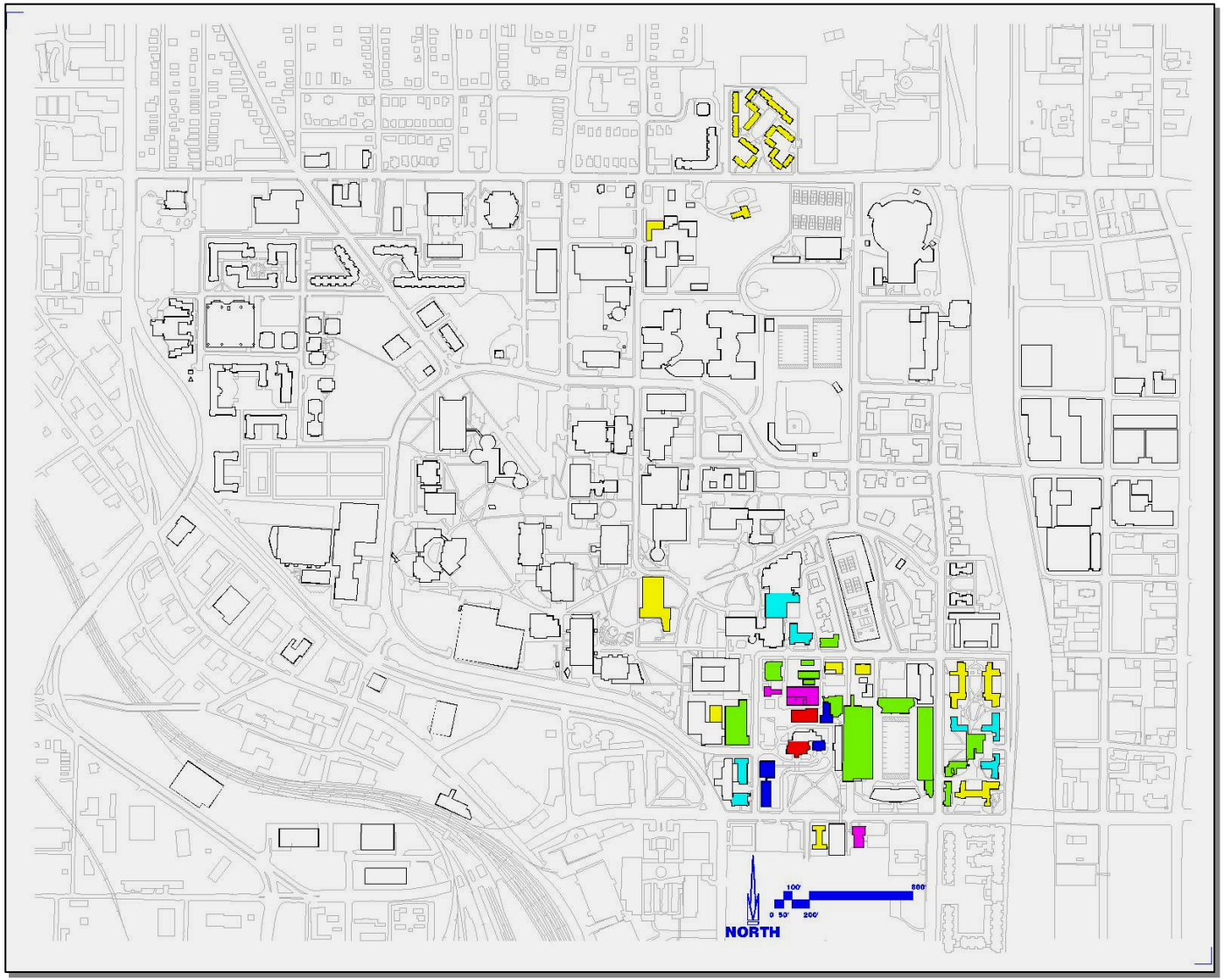
- 1800's
- 1900's
- 1910's
- 1920's

The History of Building Construction



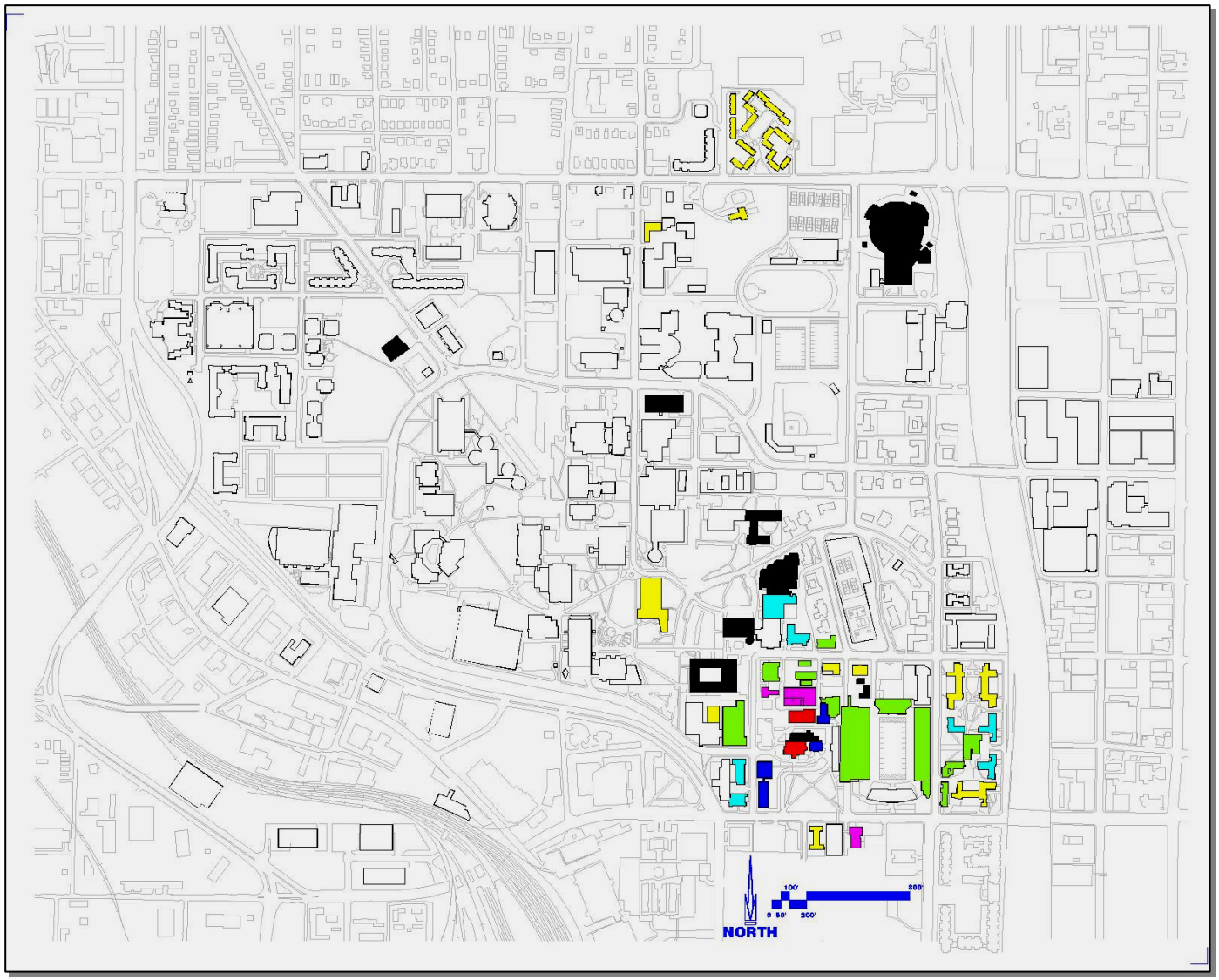
- 1800's
- 1900's
- 1910's
- 1920's
- 1930's

The History of Building Construction



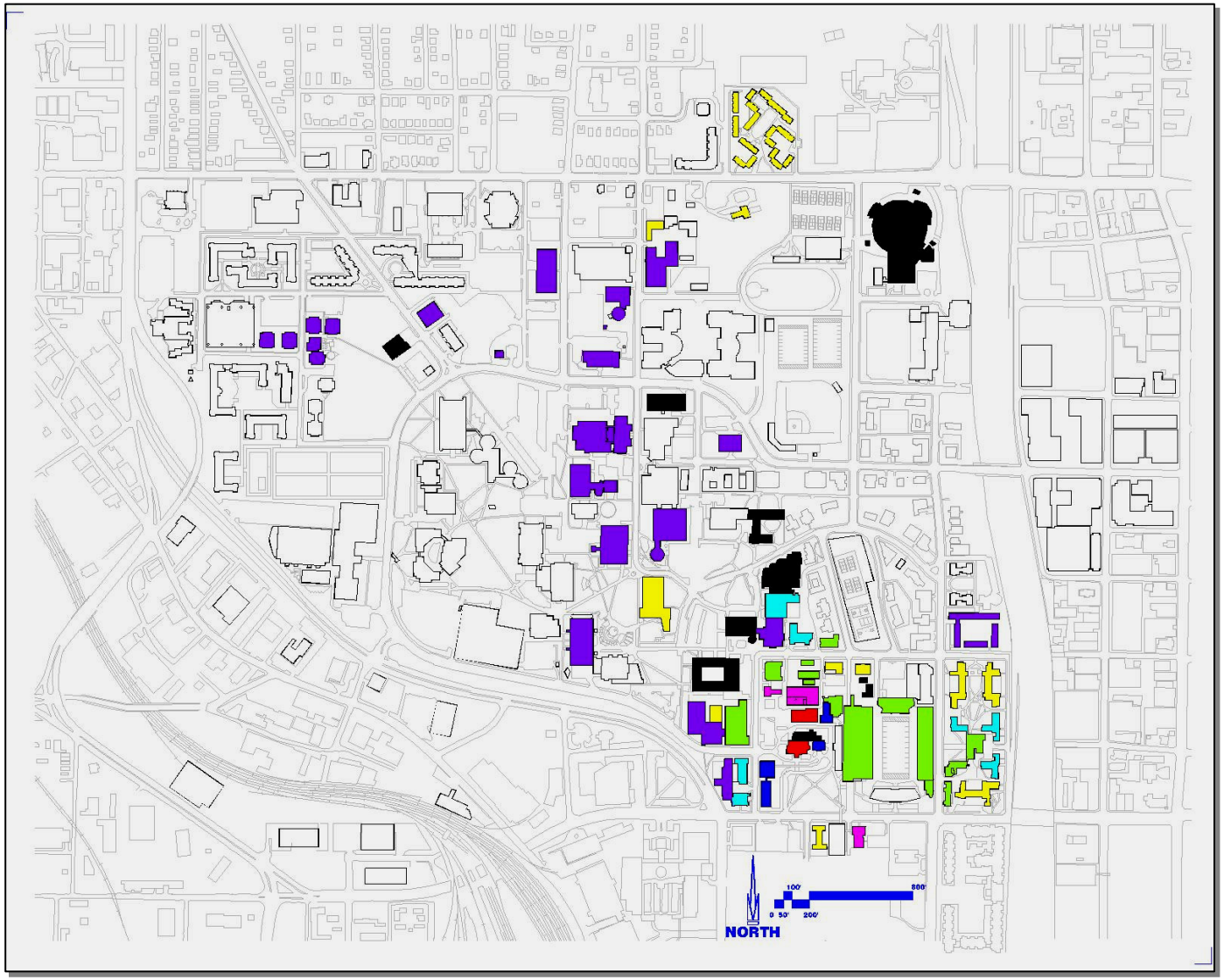
- 1800's
- 1900's
- 1910's
- 1920's
- 1930's
- 1940's

The History of Building Construction



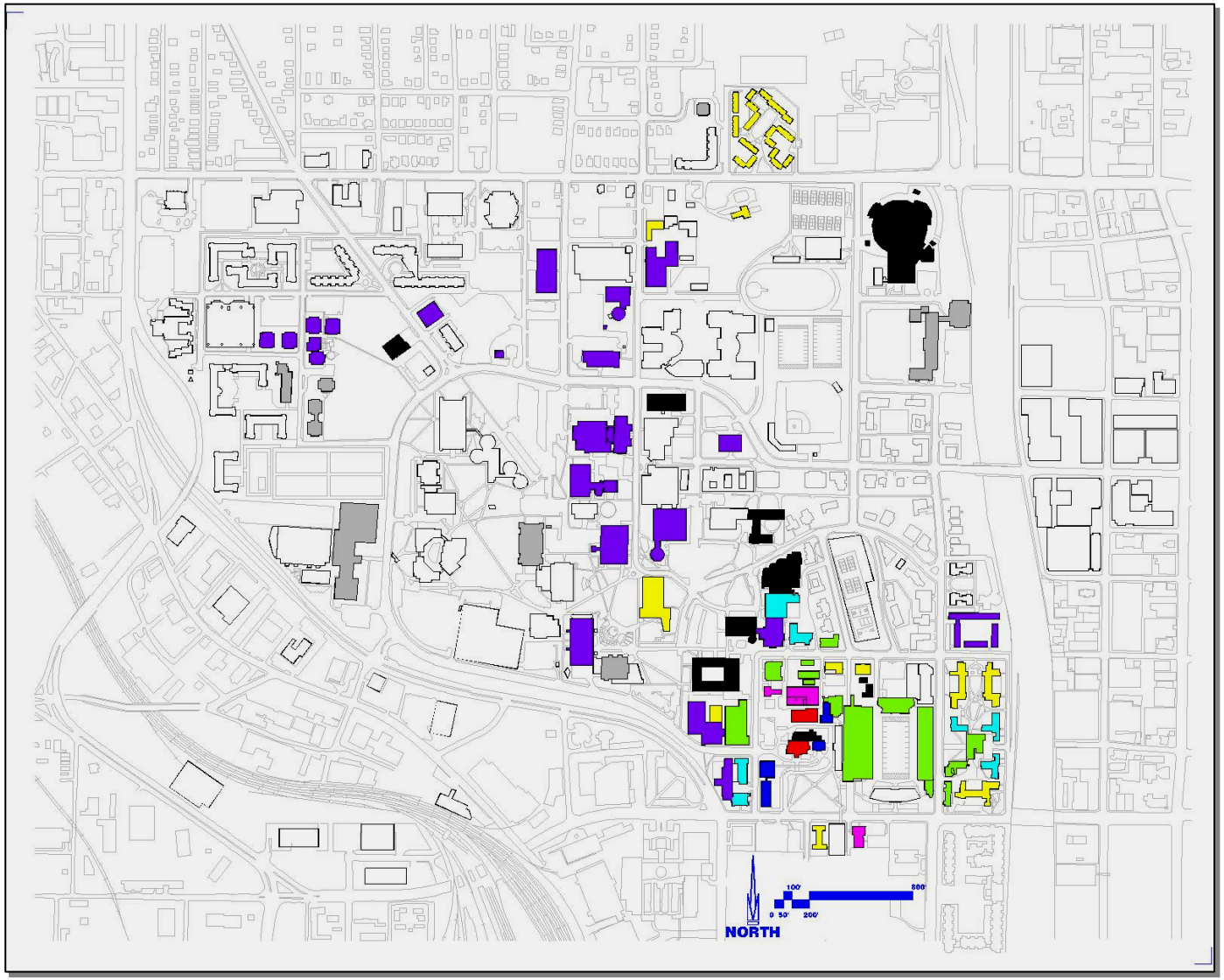
- 1800's
- 1900's
- 1910's
- 1920's
- 1930's
- 1940's
- 1950's

The History of Building Construction



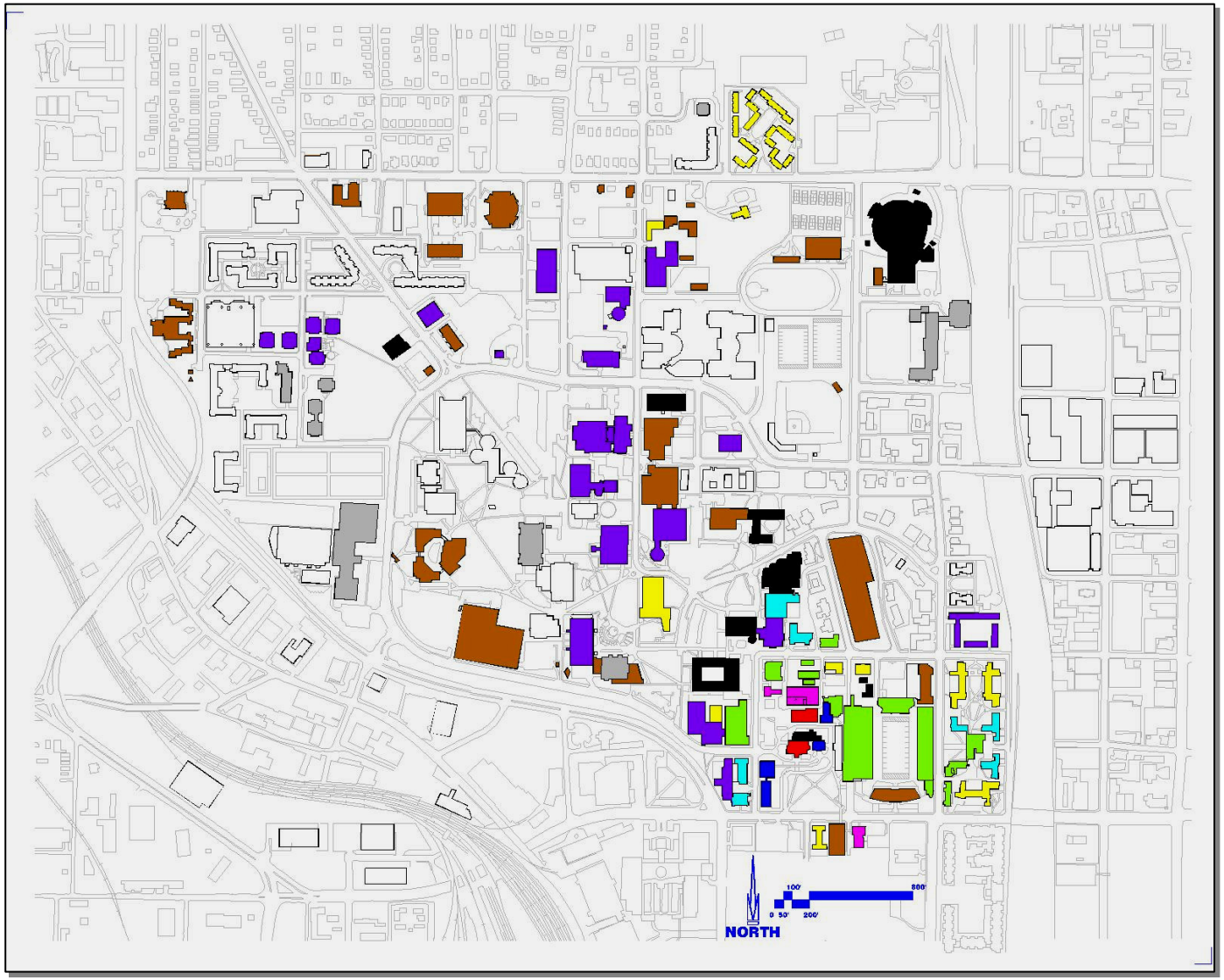
- 1800's
- 1900's
- 1910's
- 1920's
- 1930's
- 1940's
- 1950's
- 1960's

The History of Building Construction



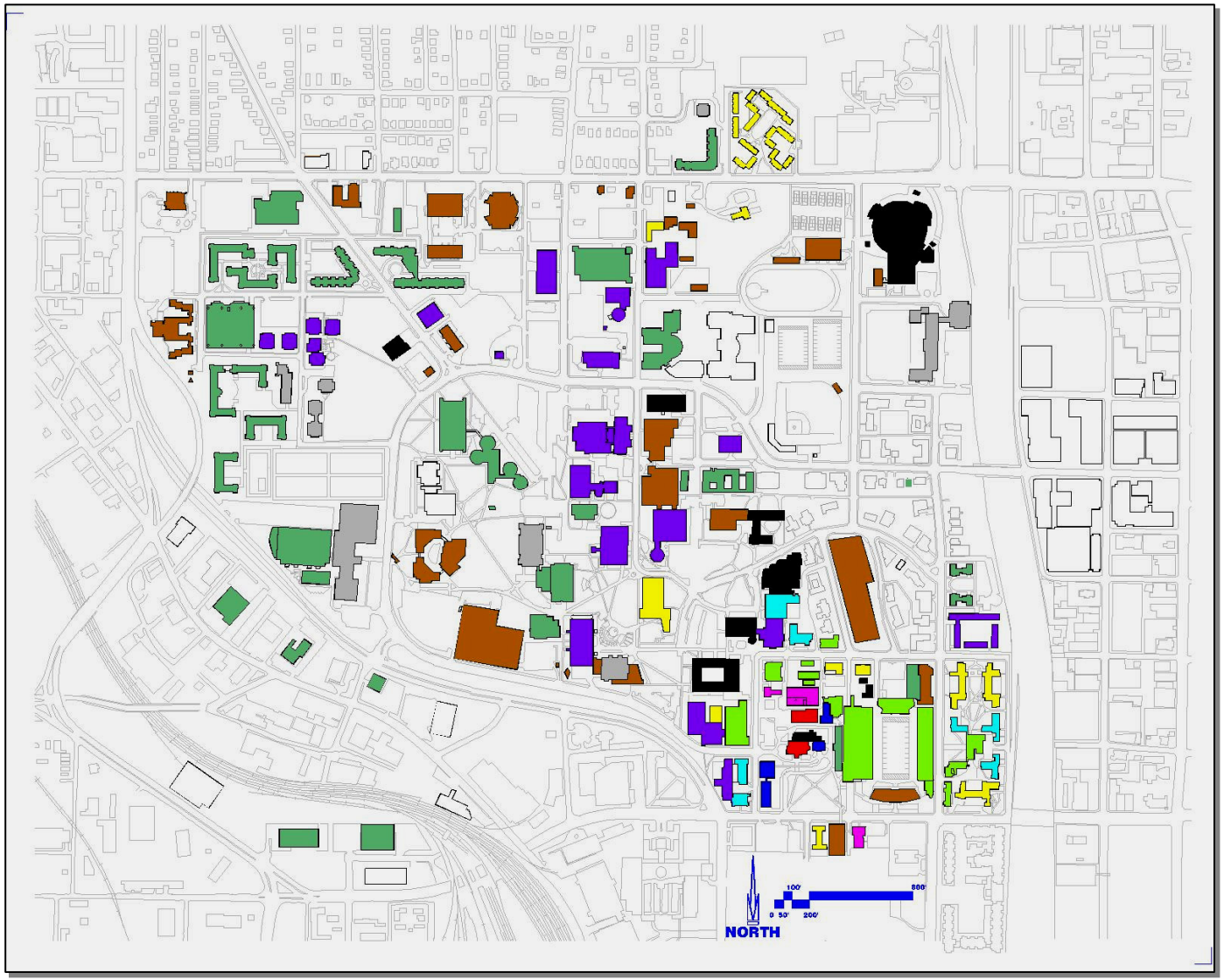
- 1800's
- 1900's
- 1910's
- 1920's
- 1930's
- 1940's
- 1950's
- 1960's
- 1970's

The History of Building Construction



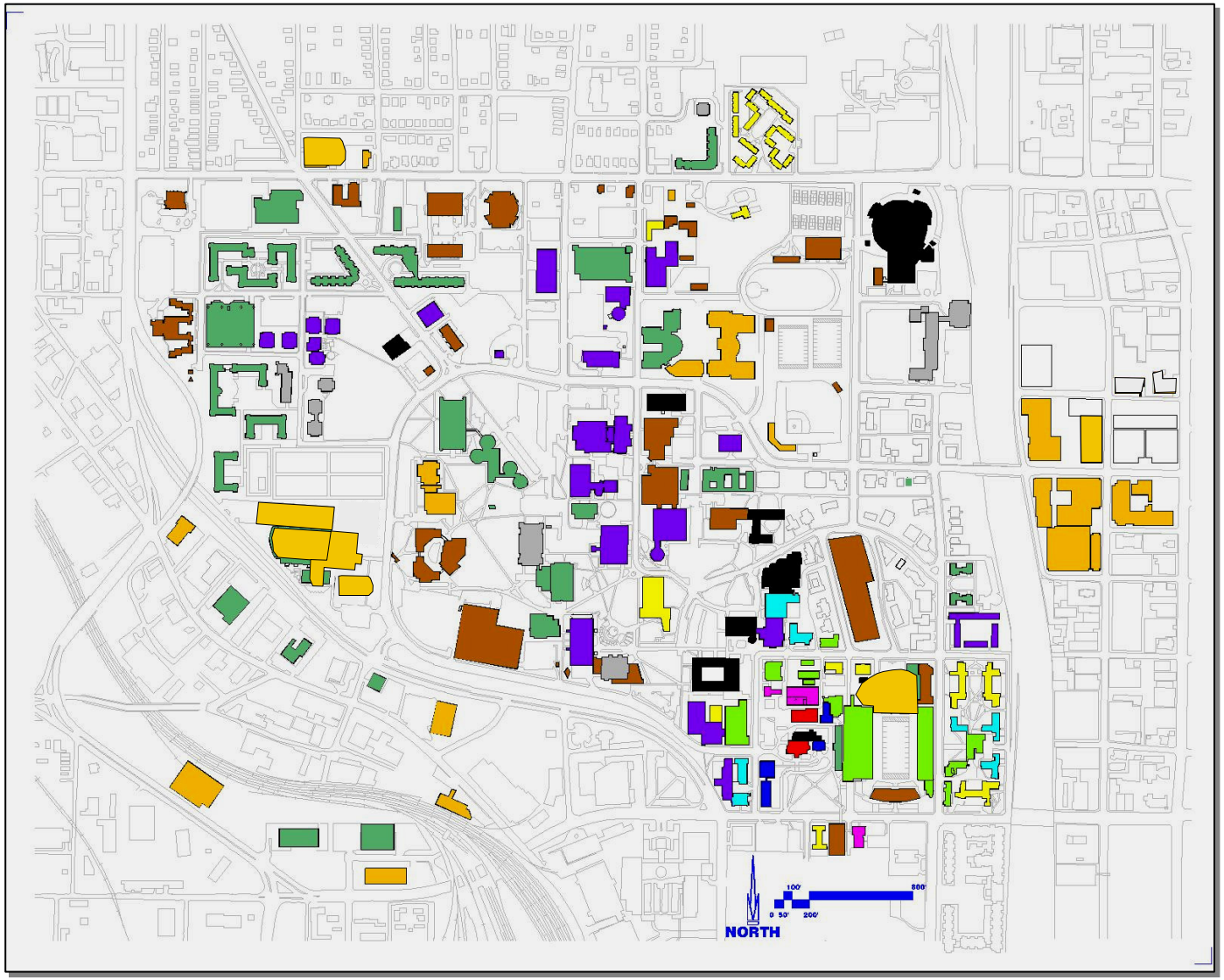
- 1800's
- 1900's
- 1910's
- 1920's
- 1930's
- 1940's
- 1950's
- 1960's
- 1970's
- 1980's

The History of Building Construction



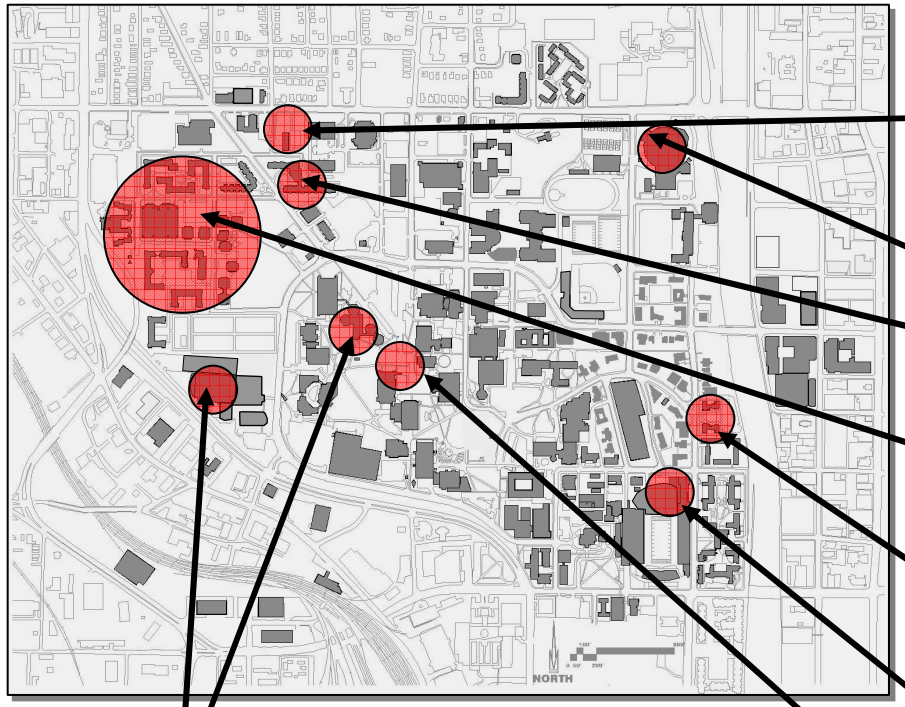
- 1800's
- 1900's
- 1910's
- 1920's
- 1930's
- 1940's
- 1950's
- 1960's
- 1970's
- 1980's
- 1990's

The History of Building Construction



- 1800's
- 1900's
- 1910's
- 1920's
- 1930's
- 1940's
- 1950's
- 1960's
- 1970's
- 1980's
- 1990's
- 2000's

1995 - 1998



GCATT
157,500 GSF $27.4 M

10th Street Chiller Plant
8,800 GSF $ 3.2 M

AMC Renovation $12.0 M

Center Street Apartments
152,800 GSF $13.9 M

Olympic Housing
523,400 GSF $64.7 M

Fourth Street Houses
30,800 GSF $ 4.6 M

Homer Rice Center
22,000 GSF $ 5.2 M

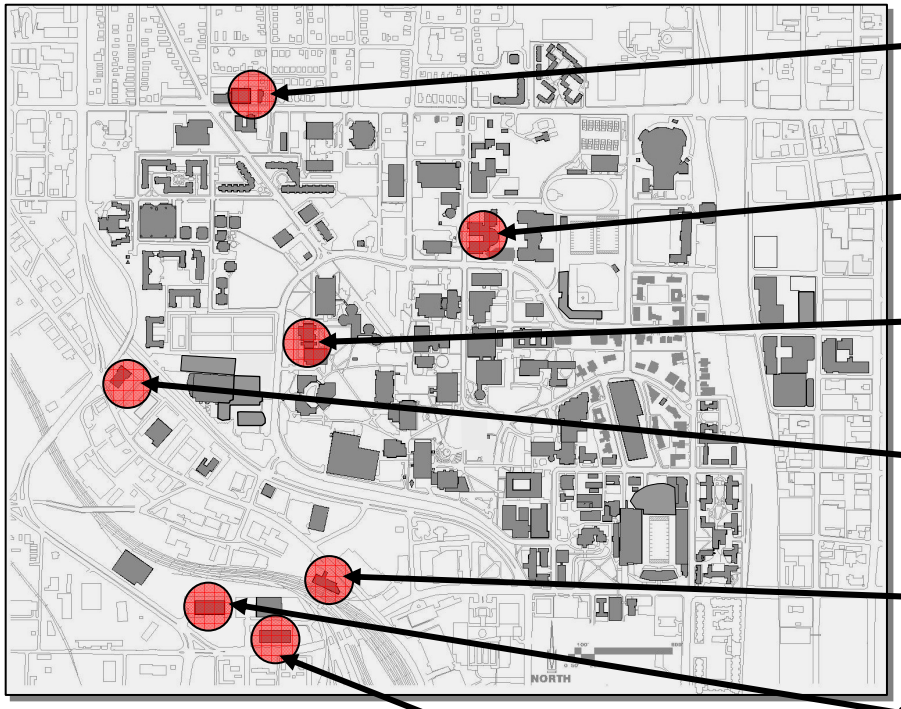
Sustainable Education Building
33,000 GSF $4.3 M

MRDC I
121,900 GSF $16.0 M

Aquatic Center
117,145 GSF $ 5.8 M

Georgia Institute of Technology

1999 - 2001



Broadband Institute Lab
6,400 GSF $ 700 K

Institute for Biosciences & Bioengineering
153,200 GSF $ 30.4 M

J. Erskine Love Manufacturing Building
153,700 GSF $ 27.3 M

OIT Office Complex
44,900 GSF $ 550 K

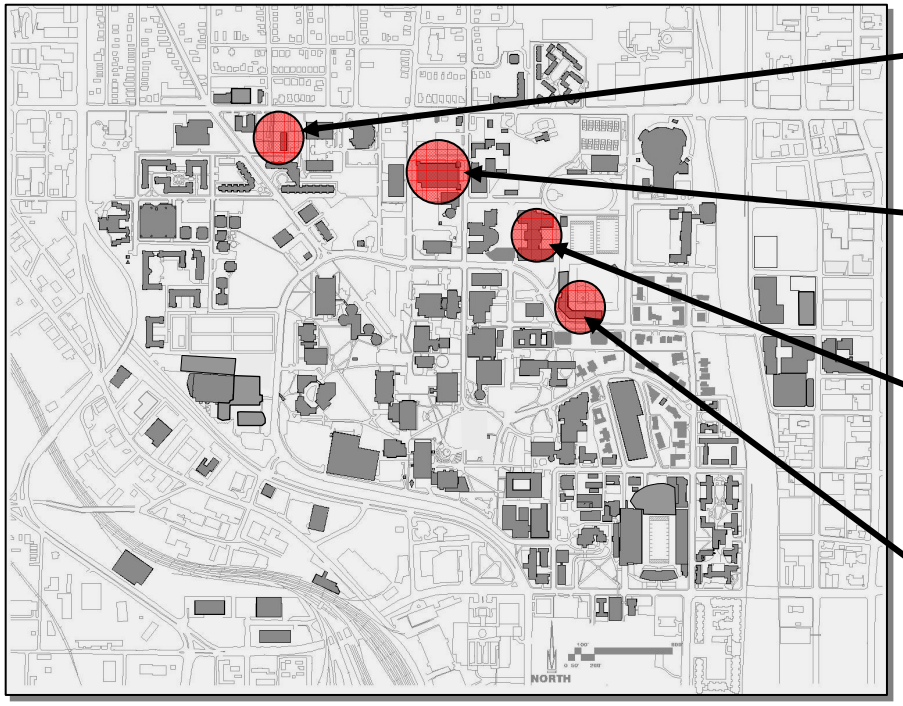
Advanced Wood Products Laboratory
18,700 GSF $ 630 K

Structures Laboratory
29,000 GSF $ 6.9 M

AE Gas Combustion Laboratory
21,500 GSF $ 7.7 M

Georgia Institute of Technology

2002



North Chiller Plant Expansion
$4.8 M

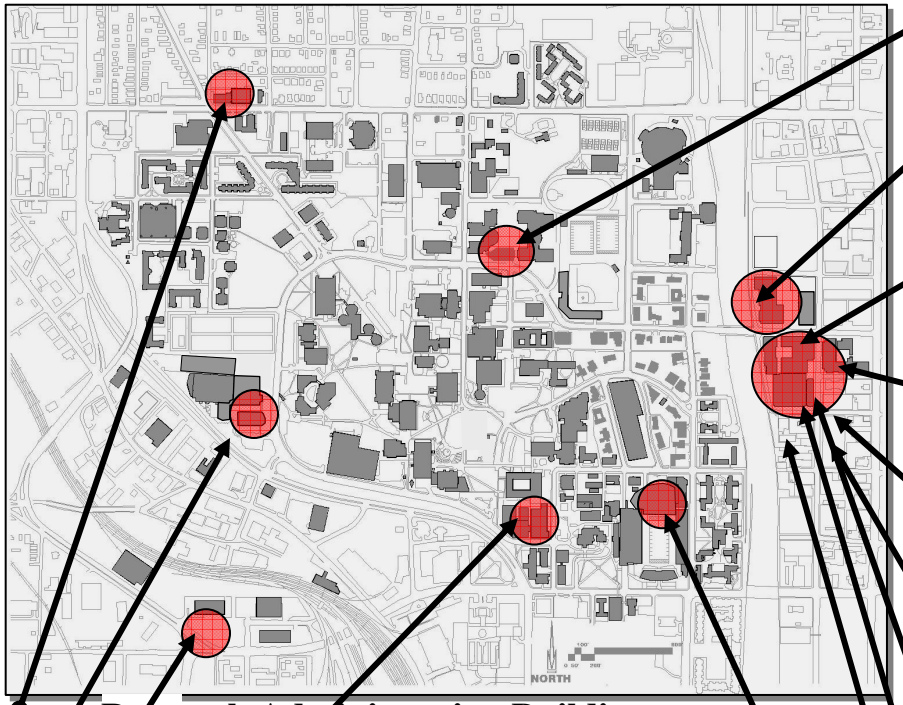
North Campus Parking Deck
268,500 SF $10.6 M

Ford Environmental Science & Technology
291,000 SF $58.0 M

Chandler Field Stadium
$9.5 M

Georgia Institute of Technology

2003



Research Administration Building
12,000 GSF $4.6 M

Student Health Center
40,000 GSF $6.7 M

Food Processing Technology
36,000 GSF $7.6 M

J.S. Coon Building
30,000 GSF $11.0 M

U.A. Whittaker Biomedical Engineering
90,000 GSF $23.0 M

TSRB/ATDC
400,000 GSF $76.0 M

DuPree College of Management
189,000 GSF $51.9 M

Global Learning Center
113,100 GSF $31.3 M

Georgia Tech Hotel & Conference Cntr
207,200 GSF $47.7 M

Parking Deck
498,100 GSF $19.5 M

Economic Dev. Bldg
48,600 GSF $13.7 M

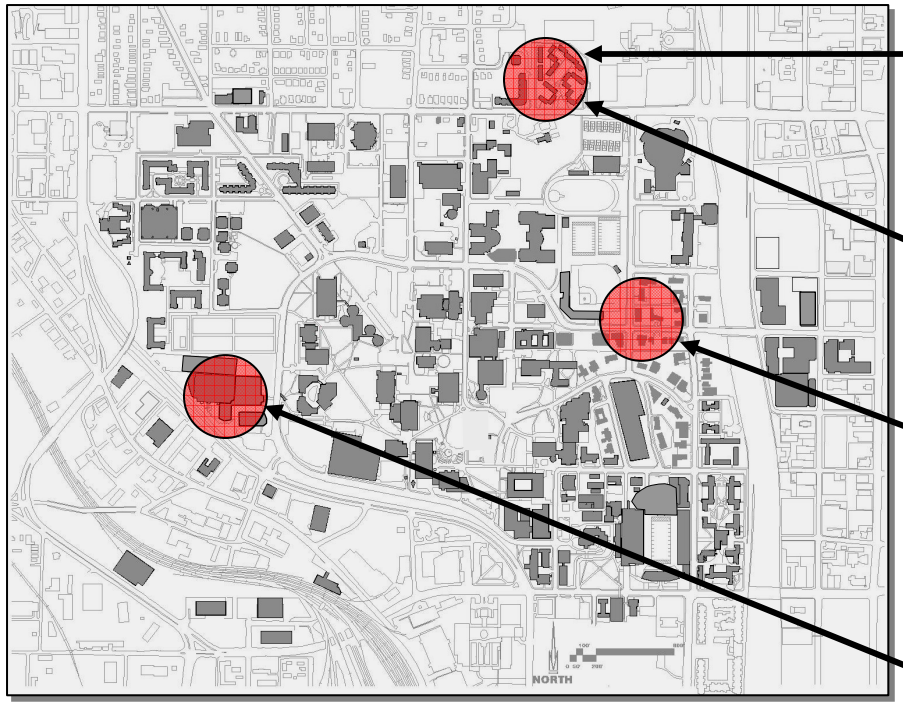
Bookstore
47,350 GSF $11.7 M

Retail
17,000 GSF $ 3.8 M

Bobby Dodd Stadium Expansion
$65.0 M

Georgia Institute of Technology

2004



Family and Married Student Housing
410,000 GSF $61.9 M

Parking Deck
270,000 GSF $10.4 M

Fifth Street Project
$2.5 M

Student Athletic Complex
280,000 GSF $44.0 M

Georgia Institute of Technology

2005 +

Advanced Cleanroom Complex
150,000 GSF $80.0 M

Molecular & Materials Sciences
200,000 GSF $60.0 M

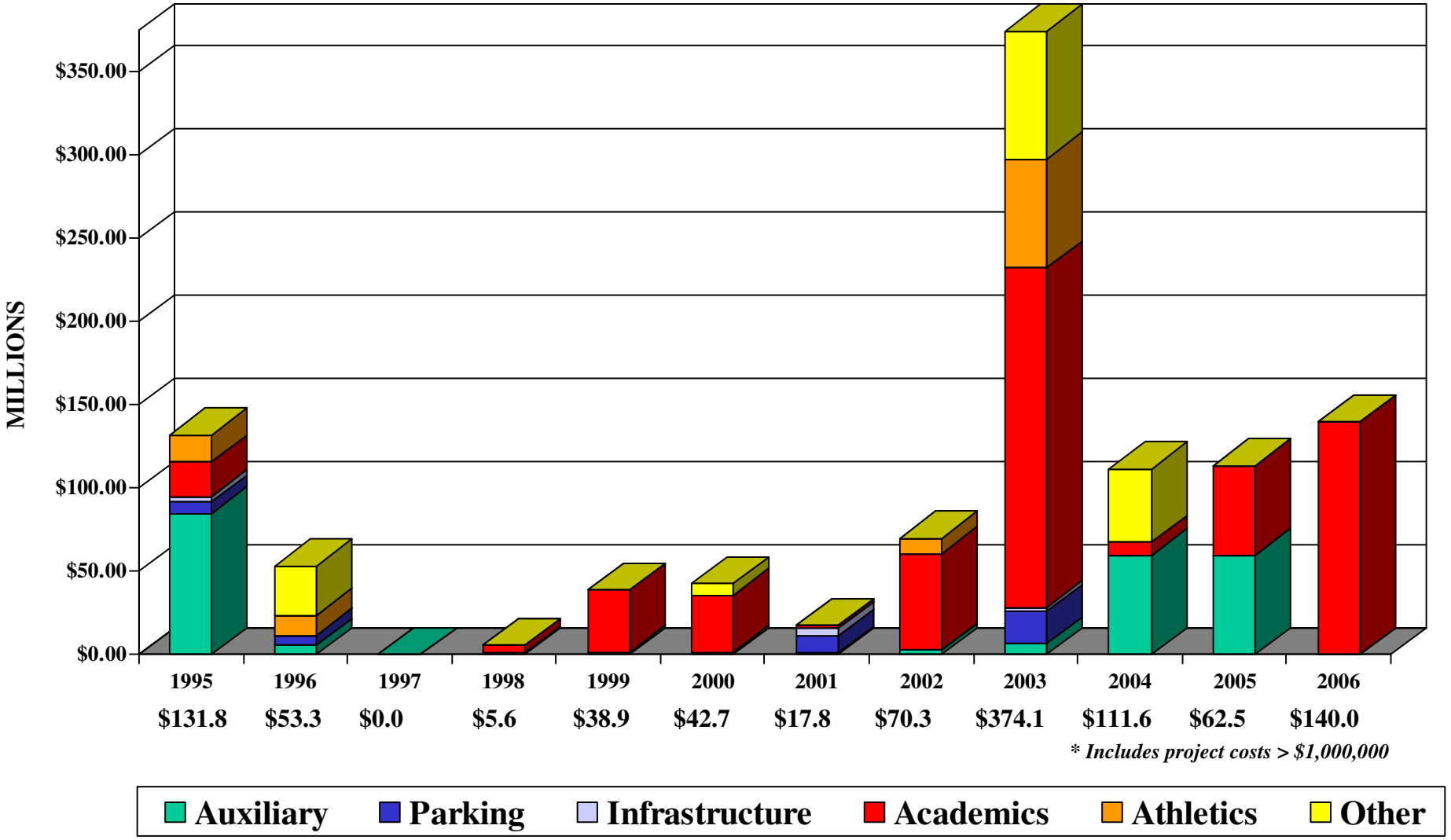
Klaus Advanced Computing Building
210,000 GSF $53.5 M

Parking Deck
170,000 GSF $ 9.0 M

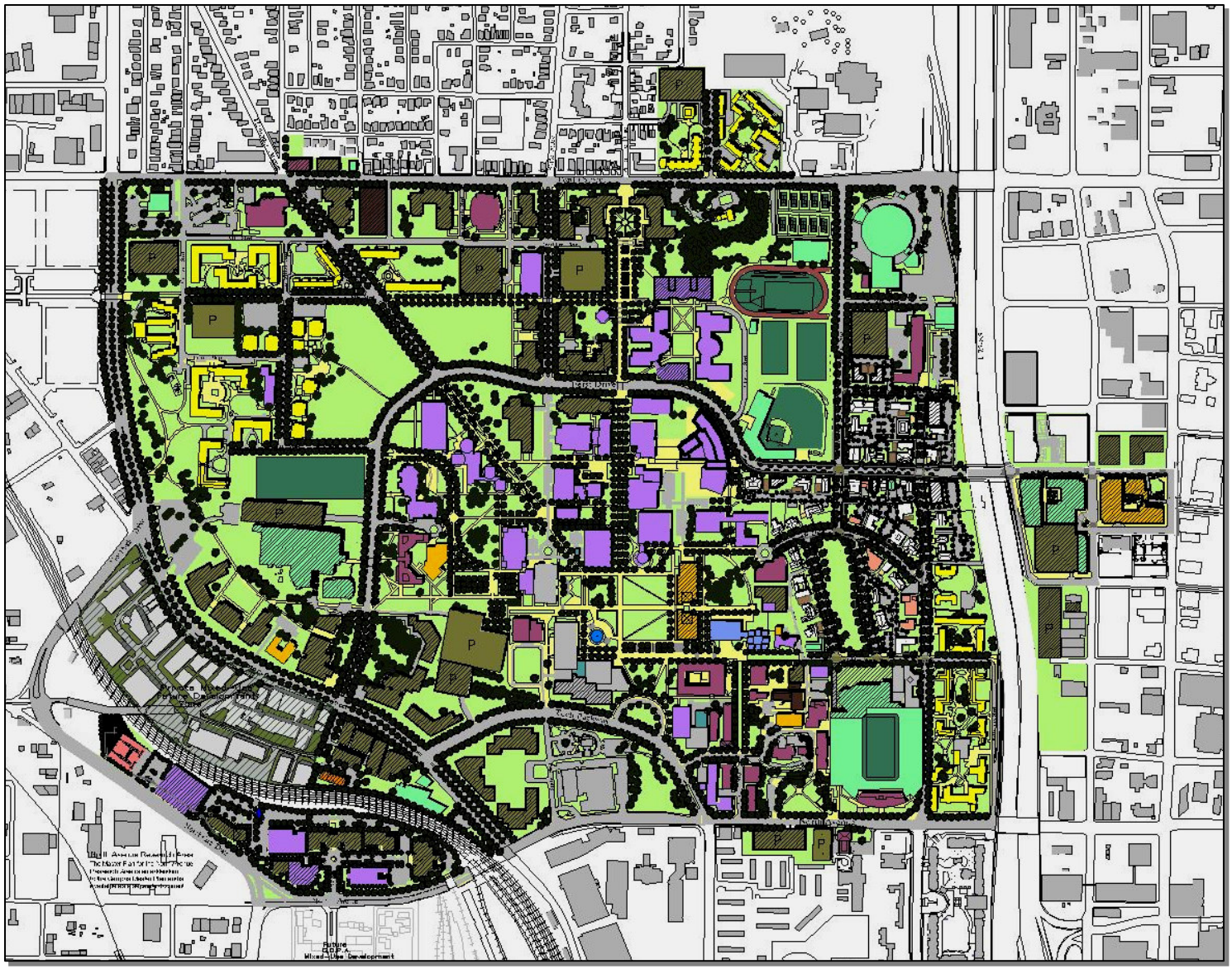
Innovative Learning Resource Center
205,000 GSF $42.0 M

Electrical Substation
$25.0 M

Major Capital Expenditures 1995 -2006



The Master Plan



Maintaining excellence in a challenging budget environment

- ➔Drivers of the planning process
- ➔Identify the basic questions
- ➔Review guiding principles

Enrollment considerations

- Increasing graduate enrollment
  - In disciplines like the sciences and management
  - In interdisciplinary programs
  - At GT Lorraine in France and GT Asia-Pacific in Singapore; other dual degree options
  - Through distance learning; executive programs
- Absorbing undergraduate growth through GTREP and transfer programs

Peer enrollment composition

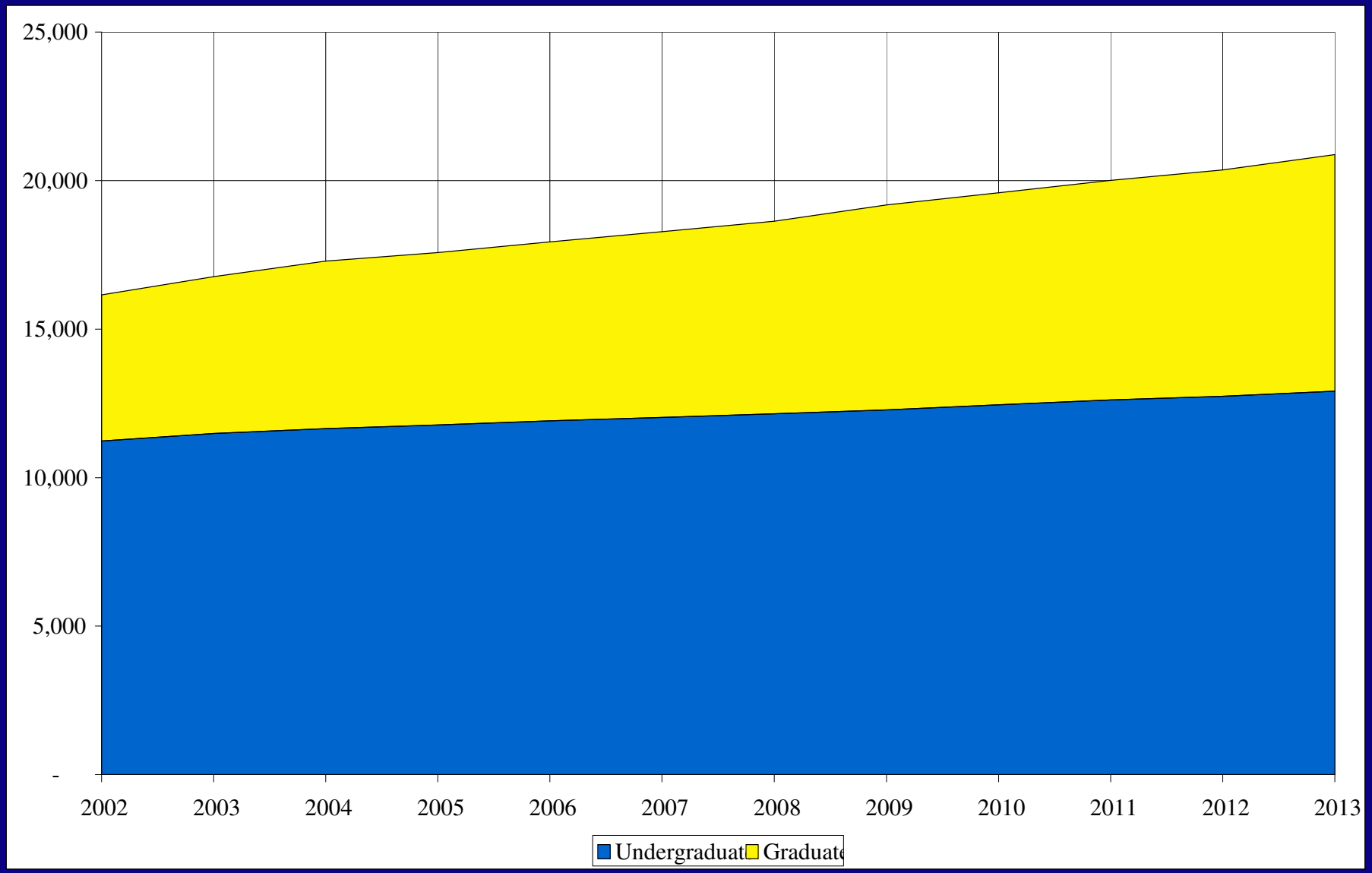
Institution	Total	Graduate	% Grad
MIT	10,317	6,139	60%
Stanford	18,297	10,937	60%
Carnegie Mellon	9,373	4,026	43%
Michigan	35,700	11,228	31%
Georgia Tech	**16,479**	**5,022**	**30%**
UC Berkeley	32,408	8,693	27%
Illinois-Urbana	37,209	8,966	24%

Quality of Education: A critical issue

- Student/faculty ratio goal: 16/1 (now 21/1)
- Would require 550 new faculty by 2013
- Space requirements:
  - Classrooms
  - Research labs
  - Offices for faculty and attendant grad students
  - Support services

Projected enrollment

(2002-2013)



Next generation GT facilities

Advanced Clean Room Building

Undergraduate Learning Center

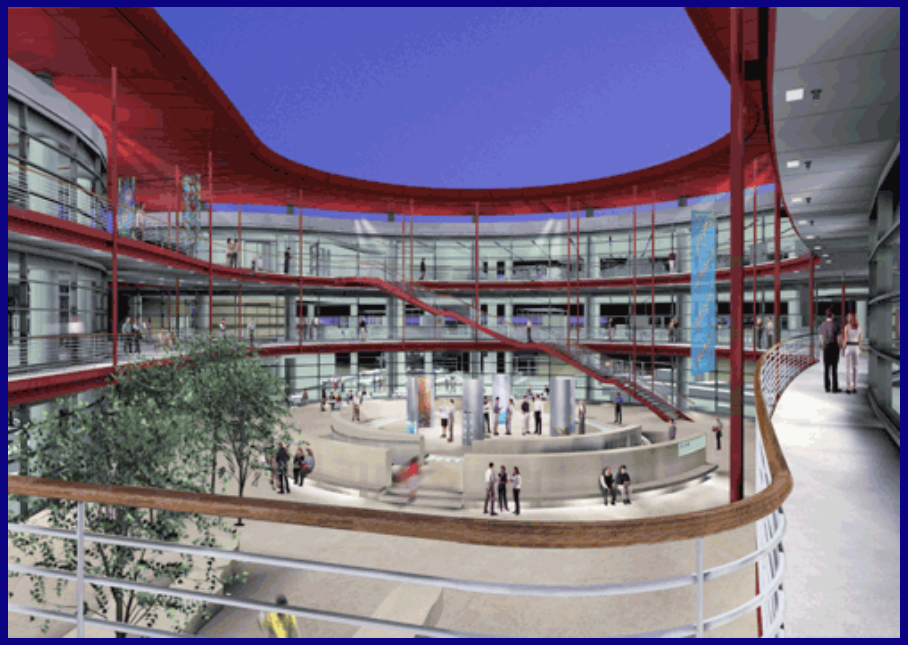
Molecular Science and Technology

Facilities:
The best keep improving…

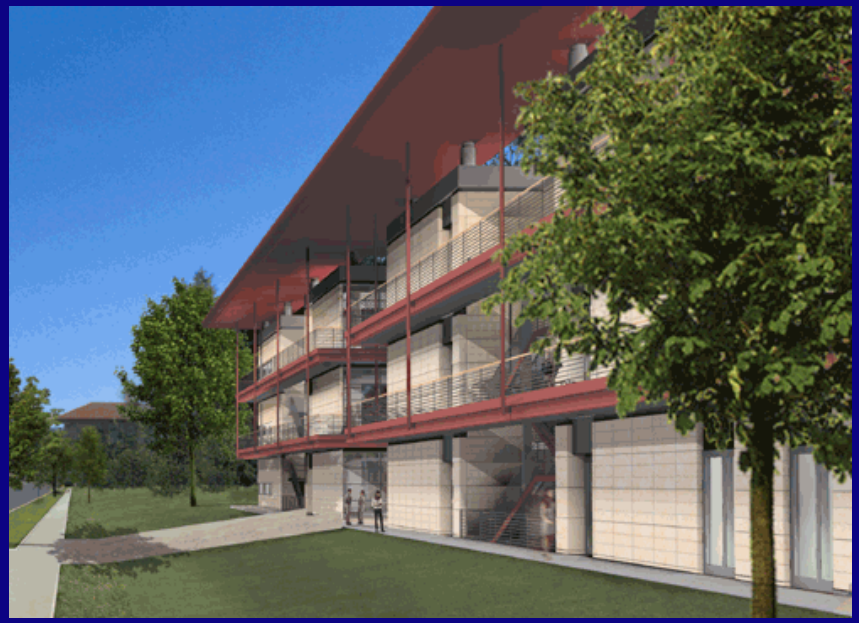
Stanford University

Clark Center for Biomedical Engineering and Sciences

- $150 million
- 182,500 GSF



The Clark Center will house research for biocomputation, biophysics, biodesign, chemical biology, genomics/proteomics and regenerative medicine. It will also house the newly evolving Department of Bioengineering, a large cafe, an auditorium, and several seminar rooms.



Massachusetts Institute of Technology

The Stata Center for Computer, Information, and Intelligence Sciences

- $212.5 million
- 713,000 GSF

The Ray and Maria Stata Center will include the William H. Gates Building housing the Laboratory for Computer Science; the Alexander Dreyfoos Building housing the Artificial Intelligence Laboratory, the Laboratory for Information Decision Systems, and the Department of Linguistics and Philosophy; a below grade service facility; and 2 levels of below grade parking.

University of Michigan - Ann Arbor

Biomedical Science Research Building

- $220 million
- 472,000 GSF

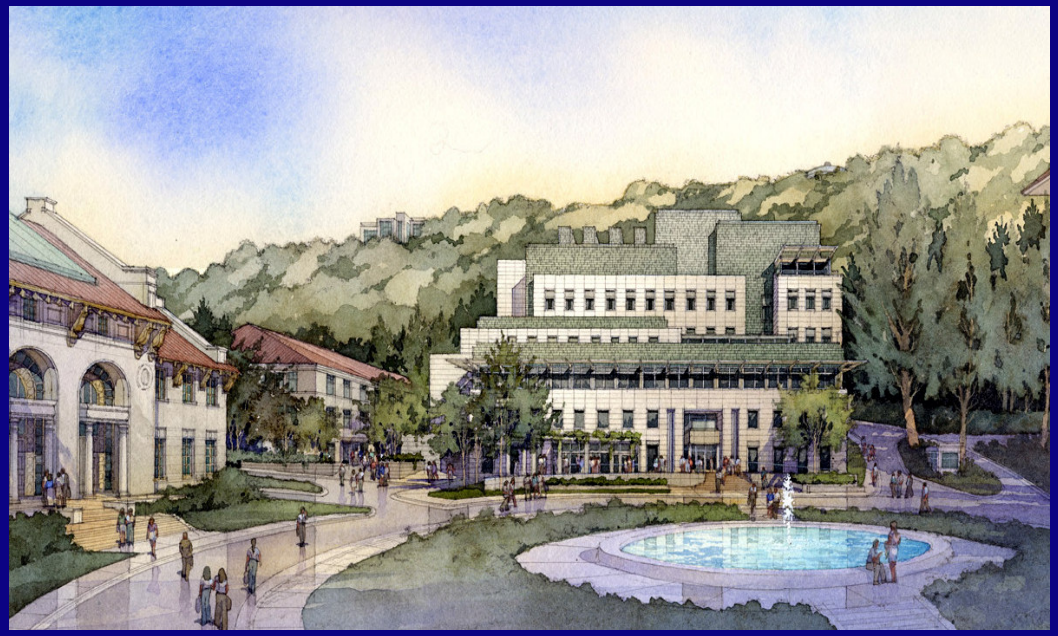
Cardiovascular Center

- $199 million
- 350,000 GSF

University of California-Berkeley

Stanley Biosciences and Bioengineering Facility

- $162.3 million
- 285,000 GSF



The Stanley facility will be dedicated to structural biology, bioengineering, chemical biology, computational biology, magnetic imaging, tissue engineering, and other disciplines. The facility is partially funded by the state through the California Institutes for Science and Innovation program (Cal-ISI).

Yale University

Environmental Sciences Facility

- 98,000 GSF
- First of $500 million, five-building project

The Environmental Sciences Facility is adjacent to the Peabody Museum of Natural History and supports its work. The $500 million investment in science and technology facilities also includes new buildings for the Department of Chemistry; the Department of Molecular, Cellular and Developmental Biology; the Faculty of Engineering; and a second environmental facility for the School of Forestry and Environmental Studies.

Basic Questions: How do we…

- ➔ Recruit our share of the best and brightest students?
- ➔ Generate funds for 550 new faculty?
- ➔ Continue to build and renovate facilities to keep pace with the competition?
- ➔ Maintain programs of distinction while lifting others to prominence?
- ➔ Manage/plan for the size of the student body?

Guiding principles

- ➔Stay focused on our mission and strategic vision.
- ➔Continue to make strategic investments that leverage strengths.
- ➔Anticipate/influence trends at the national/ international level and be prepared to adapt.
- ➔Build our case for sustained state investment.
- ➔Leverage private and industry support.
- ➔Create funds for strategic investments.
- ➔Develop alternative revenue sources.

Guiding principles, cont.

- ➔Assess and understand where the competition is going.
- ➔Optimize effective use of collaborations.
- ➔Emphasize continuous improvement in all areas of the institution.
- ➔Continue to focus on people.